



# NORTH CAROLINA HIGHWAYS & PUBLIC WORKS

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Friday, December 19, 1947

## \$200,000 Loss Caused By December 15 Fire At Fayetteville Shop

Fayetteville — Property losses estimated at \$200,000 were sustained here December 15, when fire destroyed the building and equipment of the Third Division highway shop, largest of its kind in the State.

Spreading swiftly throughout the brick veneer building, the flames started when an electric light cord used by A. R. Nickles, a mechanic who was working on a truck in the shop, short-circuited and ignited the truck's gas line. The fire spread so quickly that the building was almost entirely destroyed by the time that the Fayetteville Fire Department reached the scene. Nickols and another mechanic, A. M. Arthur, sustained minor burns, but 35 other workers who were on duty at the time of the fire escaped from the building uninjured.

Destroyed along with the building, which was a brick veneer structure formerly used by the Cape Fear Fair Association, was an estimated \$55-60,000.00 worth of spare parts, several hundred tires and several motor vehicles. Highway workers at the scene of the fire were successful in saving a small amount of office furniture and some of the files of records, but little else, according to Equipment Engineer S. C. Austin.

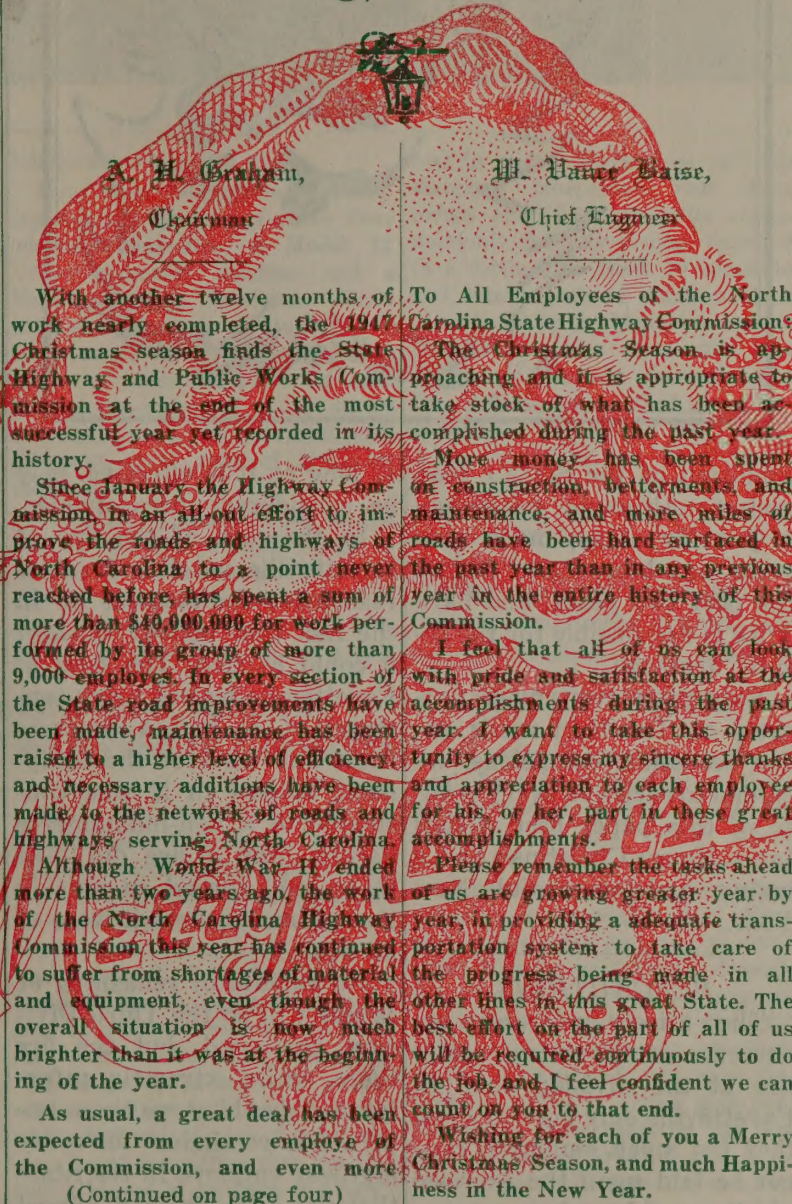
Commenting on the major loss  
(Continued on page four)

## PRICE TRENDS AND SUPPLY BY R. G. KING Purchasing Department

This week's column is devoted almost entirely to bringing you delivery information which we think will be helpful in determining your inventories in the future. The information is gathered from a leading monthly publication which has been compiled from reports from leading manufacturers.

There is no indication of either a price recession or a great improvement in deliveries for the next 8 to 12 months. While some items are a little more plentiful others are harder to obtain than at any time since prewar and lists  
(Continued on page four)

## A Christmas Message From



A. H. Graham,  
Chairman

W. Vance Baise,  
Chief Engineer

With another twelve months of work nearly completed, the 1947 Christmas season finds the State Highway and Public Works Commission at the end of the most successful year yet recorded in its history.

Since January the Highway Commission in an all-out effort to improve the roads and highways of North Carolina to a point never reached before, has spent a sum of more than \$40,000,000 for work performed by its group of more than 9,000 employees. In every section of the State road improvements have been made, maintenance has been raised to a higher level of efficiency, and necessary additions have been made to the network of roads and highways serving North Carolina.

Although World War II ended more than two years ago, the work of the North Carolina Highway Commission this year has continued to suffer from shortages of material and equipment, even though the overall situation is now much brighter than it was at the beginning of the year.

As usual, a great deal has been expected from every employee of the Commission, and even more  
(Continued on page four)

To All Employees of the North Carolina State Highway Commission: The Christmas Season is approaching and it is appropriate to take stock of what has been accomplished during the past year. More money has been spent on construction, betterments, and maintenance, and more miles of roads have been hard surfaced in the past year than in any previous year in the entire history of this Commission.

I feel that all of us can look with pride and satisfaction at the accomplishments during the past year. I want to take this opportunity to express my sincere thanks and appreciation to each employee for his or her part in these great accomplishments.

Please remember the tasks ahead of us are growing greater year by year, in providing a adequate transportation system to take care of the progress being made in all other lines in this great State. The best effort on the part of all of us will be required continuously to do the job, and I feel confident we can count on you to that end.

Wishing for each of you a Merry Christmas Season, and much Happiness in the New Year.

## Wright Bridge Story Published In Organ Of Wood Preservers

Raleigh—"Last Link of Wright Memorial Bridge Under Way by North Carolina" is the title of a story now appearing in WOOD PRESERVING NEWS, house organ of the American Wood Preservers' Association with headquarters in Chicago.

Devoting itself exclusively to stories about wood construction, the publication states: "About twenty-five years after the famous flight of the Wright Brothers at Kitty Hawk, N. C. private parties undertook the construction of a 14,800 foot toll bridge across Currituck Sound, just above Kill Devil Hill, in order to develop this strip of sandy shore for recreation purposes."

"The construction of this bridge stimulated the development of the shore outlining the northeastern region of the State to such extent that within a few years it became desirable for the State to take over the structure for the removing of tolls and to afford better and more substantial facilities for the ever-increasing traffic."

"In 1940, rebuilding of the structure was undertaken by the State, with its own forces, and as a State project. At this time, the first 4,000-foot unit was begun at the eastern end of the Sound. This construction involved replacement  
(Continued on page four)

## NOVEMBER RECORD

Raleigh—Exceeding all previous November traffic records, the flow of vehicles past the Highway Commission's 20 electric-eye traffic counters last month reached a total of 52,713 units on an average day, according to James S. Burch, engineer of statistics and planning.

Former record for November, 51,040 vehicles on an average day, was reached in 1941, Burch said. This year's November traffic, however, showed a decline of approximately 2,000 vehicles from the average daily record set in October.

Rain and other weather factors cause a seasonal decline in traffic which can be expected to occur with regularity each year, Burch pointed out. North Carolina's next big upswing in traffic volume is expected in March.

## North Carolina Officials Give Addresses Before SASHO Convention In Miami

Miami—Highlighted by addresses presented by Chief Highway Engineer W. Vance Baise, Bituminous Engineer T. V. Fahnestock and Auditor Sam N. Smith, the program of the sixth annual convention of the Southeastern Association of State Highway Officials, held here December 7-11, included active participation by the North Carolina highway delegation.

Speaking before the convention

on "The Secondary Road Program in North Carolina," Engineer Baise outlined the types of construction work currently being carried on in his State and reviewed the policy of the North Carolina Highway Commission with regard to new construction.

"Approximately 90 per cent of traffic on secondary farm-to-market roads," Baise told the group, "is  
(Continued on page three)

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RALEIGH, N. C.

T. C. Wagstaff, *Editor*

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### MERRY CHRISTMAS!

Simultaneously, this issue of NORTH CAROLINA HIGHWAYS & PUBLIC WORKS again celebrates the Christmas season and the anniversary of its own founding, and hopes in so doing, to pass on a measure of cheer and service to those who happen to give their attention to its pages.

On December 14, 1945, the first issue of the paper was published as a new venture by the State Highway and Public Works Commission, which aimed at giving the Commission's 9,000 employees a house organ of their own. Purpose of the paper was to print news and editorial matter of especial interest to all persons with the welfare of the North Carolina highway system at heart.

Since the founding of the paper, it has had three men as editors, and the highway picture which it seeks to disclose in December, 1947 is far different from that which existed in December, 1945 when the first issue was published. With World War II just over and work of every sort hamstrung by shortages, the highway situation was gloomy that Christmas.

This Christmas, however, the story is a different one, thanks to the prolonged and diligent efforts of all of the employees of the Highway Commission. At the end of 1947 the citizenry of North Carolina can take pride in the

condition of the State's road system. Although perfection is yet far away, much progress has been made during the past two years, and hard work is responsible for the results achieved.

Expecting even more progress on Tar Heel roads under peacetime conditions, we extend to each and every reader of this paper best wishes for a Merry Christmas and a happy and successful New Year.

### PRECAUTIONS

The entirely unforeseen occurrence of the recent costly fire at the division shop in Fayetteville only goes to show that too much emphasis cannot be laid upon the exercise of all possible safety precautions by all highway workers throughout the State.

Hindsight is usually better than foresight, and it is often easy to assign a reason for any accident after it has happened. Beforehand, it is an easy matter to minimize risks, overlook possible sources of danger, and generally be convinced that no unfortunate occurrence may take place.

All of which tends to prove that no form of precaution,

so long as it is effective, may be considered unreasonable.

In the case of the fire at Fayetteville, possibly the chief reason for the disaster lay in the fact that nobody thought it could happen. The shop at Fayetteville was of brick construction, it had a concrete floor, and most of the equipment housed in it was considered of a non-inflammable nature. But a fire did take place, and spread so quickly that efforts to fight it were of no avail.

No amount of rehashing of causes will do the Third Division any good, but the fire there, while extremely unfortunate, should serve as an imperative reminder to every highway employee in the State that fire hazards exist almost everywhere that a substantial amount of equipment or materials is gathered together under one roof. Realizing that such hazards exist, and that they must be guarded against, is the first important step toward preventing their development into major disasters.

After an evening, or a week, or a year you get tired of her good-looking legs and wish the woman had some sense.



### Today's Chuckles

A mother, testifying on behalf of her son, swore that he "worked on a farm ever since he was born."

Triumphantly the opposing lawyer leaned over to her and thundered: "You tell this court that your son worked on a farm ever since he was born?"

"I do."

"What did he do the first year?"

"He milked."

\* \* \*

Engineer: (as they dined in a private room at a roadhouse): "Er- how about a little demitasse now, my dear?"

Curvaceous Creature: "I knew it! You weren't treating me like this for nothing."

\* \* \*

The ladies met on a train. "I'm from Boston," haughtily remarked one. "There — breeding is everything."

"Well, I'm from St. Louis," said the other. "We like it there too, but its not everything!"

\* \* \*

A customs officer, while examining a tourist's baggage, discovered a bottle of whiskey. "I thought you told me there were only night clothes in that suitcase?"

"Right," replied the tourist, "that's my night cap."

\* \* \*

"Really," said Mrs. Scott, reading her paper at breakfast, "the world is getting worse and worse. Just listen to this advertisement: 'Typist wanted, must be young, fast, and experienced.'"

\* \* \*

Jackie, aged eight, was returning from a visit to his grandmother. "Oh, the train was fun," he said when his mother met him. "But," he added, puzzled, "Some soldiers were mean to me. You see, when I got on the train, a nice lady came and sat down and we talked till she got off. The minute she left, two soldiers across the aisle came over and bawled me out. They said, 'You little weasel, why didn't you say that babe wasn't your mother?'"

\* \* \*

Motorist—"How far is it to the next town?"

Native—"Nigh on to five miles as the crow flies."

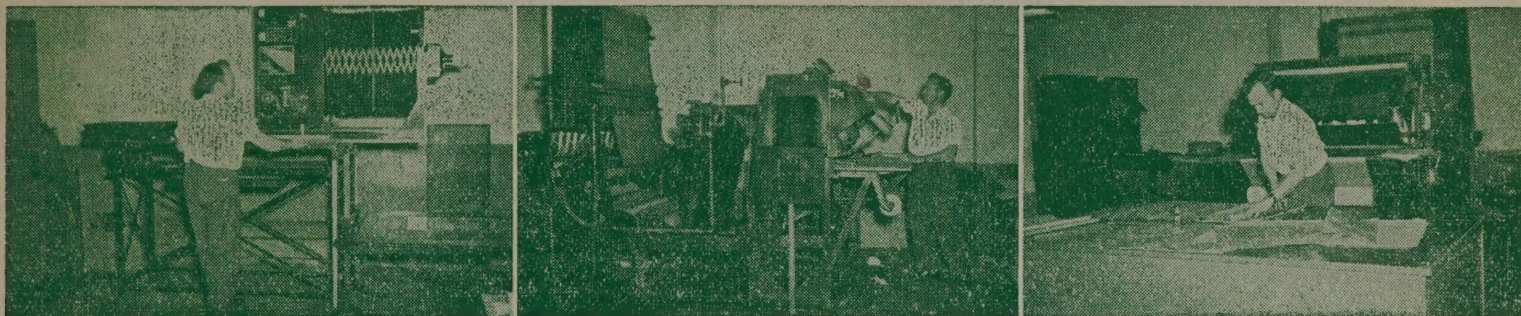
Motorist—"Well, how far is it if a damned crow has to walk and carry an empty gasoline can?"

\* \* \*

Father: "Now, aren't you glad you prayed for a little sister?"

Small Boy (after viewing twin sisters): "We-e-ll, yes, Daddy, but aren't you glad I stopped praying when I did?"

# Blueprinting Is Necessary Phase Of Highway Work



Purely a mechanical function, but one which is of prime importance in carrying out almost all of the activities of the State Highway and Public Works Commission, is the manufacture of blueprints, carried out by a staff of four men working at highway headquarters in Raleigh.

In the course of a year, according to current estimates, the blueprinting department uses more than 85 miles of blueprint paper, and turns out thousands of copies of highway maps and sets of project plans. Lettings make the heaviest work for the blueprint personnel, for a letting of average size requires at least two weeks' work on

blueprinting detailed plans.

Equipment used in the blueprinting section includes a Number Four photostat machine, a Model 11 Pease blueprint machine and a black-and-white developer. When this equipment is operating full time, as it frequently does, 1200 yards of blueprint paper is used during the course of a day. In an average month, the blueprint men estimate, 60-65 rolls of blueprint paper are used.

Individual pieces of work turned out by the blueprinters range in size from small charts measuring 8½ by 11 inches to large maps of the entire State, measuring nine feet in length and three-and-a-half

feet in width. Work done includes standard blueprints, Van Dyke prints and black-and-white reproductions. For any project included in a letting, at least 10 complete and detailed sets of plans must be reproduced by the blueprint department. Contractors who enter bids on the projects are charged a flat fee of \$5.00 for a set of plans, regardless of the size of the project. After the letting, the contractor to whom the contract is awarded is furnished as many sets of plans as he needs to do the work, without further charge.

Although all members of the blueprinting department are not producing blueprints at all times, at

times their work is composed almost exclusively of rush jobs. At other times, their volume of production is much lighter, but all hands must be on call to begin work on a new job at a moment's notice. Men now doing the blueprinting work in Raleigh are Paul Pearson, C. G. Sugg, Charles Lassiter and Frank Putnam. All of these men acquired their skill in making blueprints while on their present job, each man learning from some former Highway Commission employee who had been assigned to the blueprint room. In turn, a number of former blueprint experts have been assigned to other work within the Commission organization.

## Right-Of-Way Agreements Are Secured For First Link Of Boulevard In Charlotte

Charlotte—Final negotiations to secure the right-of-way for the first link of the proposed cross-town boulevard across 133 pieces of property at a cost of more than half a million dollars are now underway here, according to Ben E. Douglas, Seventh Division member of the State Highway and Public Works Commission.

Bids for clearing the right-of-way along the route of the highway will be asked within the near future, Douglas said. Letting of the contract for construction of the project will probably take place next Spring, he stated.

First link of the proposed highway will extend from East Morehead to Seventh street. Completion of this portion of the highway may be possible by the end of 1948, Commissioner Douglas revealed. Second link of the project is planned to extend from Seventh Street to the Monroe road. Purpose of the highway is to provide a by-pass route connected with U.S. 74 which will make it possible for through traffic to avoid the more congested streets near the center of the city. In contrast to the normal pro-

cedure of the State Highway and Public Works Commission, negotiations for securing the right-of-way for the boulevard were conducted by a specially-appointed local real estate board composed of J. E. Barrentine, S. B. McLaughlin and Louis H. Meyer. For some time the idea of a cross-town boulevard has met with determined opposition from a group of property owners whose holdings lay along the route of the highway. Action of the three-man board is credited with the success achieved in securing the right-of-way necessary to begin construction of the first link of the new project.

Plans for the boulevard call for a completed width of 82 feet, and final cost of the project is estimated in the neighborhood of \$2,000,000. Cost of the project will be borne jointly by the State Highway and Public Works Commission, the Federal government and the City of Charlotte.

The cutting teeth of beavers continue to grow throughout their lives.

## NORTH CAROLINA

(Continued from page one)

local. In order to best serve these people it is necessary to construct and improve the roads where people live. It therefore, has been our purpose to construct secondary roads on a reasonably safe alignment and grades, securing as much sight distance as feasible, depending to some extent on the amount of traffic which the road carries."

"In the improvement of these roads," he asserted, "we have followed a policy of giving first preference to those carrying the largest volume of traffic, as well as those which will reduce the maximum travel distance to a paved or improved highway to a minimum."

Pointing out that "more than 75 per cent of the rural traffic in North Carolina is on the primary highway system," Baise warned against over-emphasis on secondary construction at the expense of neglecting the primary system. "Our primary system," he stated, "was to a great extent obsolete prior to the beginning of World War II, and practically no work was done during that time in improving this system, as all efforts were given to the war effort. It, therefore, means that much greater effort and cost will be involved in

standardizing this system over the next few years, and since these roads carry the vast majority of rural traffic we cannot neglect them while involved in the dual task of getting the farmer out of the mud and maintaining the secondary road system."

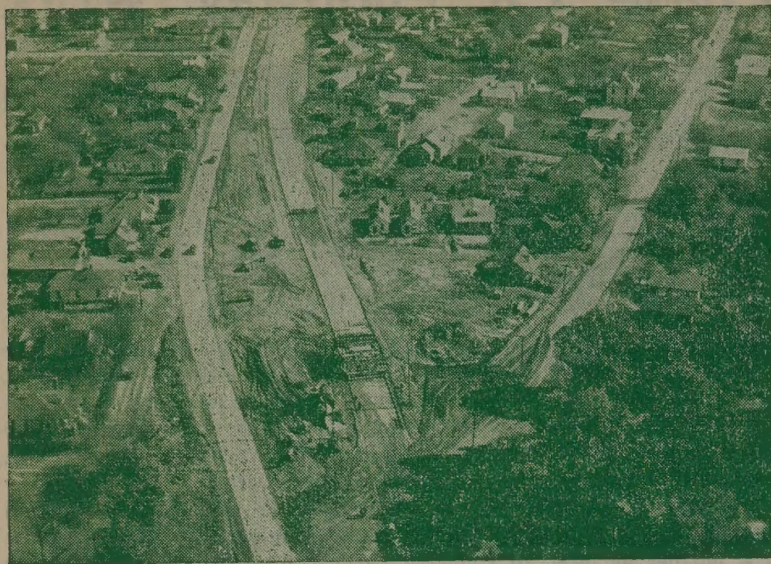
Addressing the committee on road design and construction, Bituminous Engineer T. V. Fahnestock outlined the chief methods of bituminous surfacing employed in North Carolina, while Auditor Sam N. Smith delivered an address on "Ways and Means of Financing Highway Construction and Maintenance." C. E. Proudley, engineer of materials and tests, was unable to attend the convention in person, but sent an address to be read.

## \$200,000 LOSS

(Continued from page one)

suffered by the State Highway and Public Works Commission, Chairman A. H. Graham said that vehicles and equipment used in the Third Division would be serviced temporarily in the shops of the surrounding divisions, and that every possible effort would be made to erect a temporary shop building in Fayetteville in the near future. The Third Division area served by the shop included eight counties.

## U.S. 64 PROJECT NEAR COMPLETION



Now in its final stages, paving work on U.S. 64 east of Raleigh will, when completed, provide a modern dual lane highway separated by a landscaped median strip. Totalling 2.16 miles in length, the project extends from Tarboro Street in Raleigh to a point 1,100 feet west of the Crabtree Creek Bridge. (Photo by Owen Ballance)

## Letting Of December 16 Brings Cost Of 1947 Contracts To \$27,734,895.08

Bringing to \$27,228,895.08 the total estimated cost of contract construction in North Carolina for 1947, the State Highway and Public Works Commission on December 16 received low bids totaling \$1,734,128.28 on a list of 11 Federal-aid highway projects covering 72 miles of roadway in 13 counties.

The letting, which was the last for the year, brought a total of 94 bids on the list of 11 projects. Highway Commission Chairman A. H. Graham stated that "competition at the letting was keen, but prices are still quite high because of increases in the cost of transportation and materials, especially asphalt." Expressing satisfaction with the number of bids, he said that he considered "the majority of the bids reasonable."

Projects included in the letting, and low bidders, were:

### Federal-aid

Halifax—Grading and bituminous surfacing of 10.92 miles from a point south of Roanoke Rapids toward Colliers Fork on county road, Nello L. Teer, Durham, roadway, \$174,364.50; E. P. Brinkley, Raleigh, structures, \$20,189.00.

Jones-Lenoir — Grading, surfacing and structures of 8.99 miles on U.S. 258 from a point north of intersection with N.C. 41 at Hargetts store north toward Kinston, Barrus Construction Company, Kinston, \$157,722.00.

Columbus — Grading, surfacing and structures of 13.17 miles from U.S. 701 in Habor City southeast to Nakina-Dotham and from N.C. 904 east to intersection, Sloan Construction Company, Greenville, S. C., roadway, \$214,618.33; Bowers Construction Company, Raleigh, \$27,276.00, structures.

Columbus—Grading and surfacing of 6.18 miles from a point 2.5 miles north of Nakina south through Nakina to Bugg Hill, Sloan Construction Company, \$102,895.40.

Cumberland—Structures and approaches of 0.36 miles at Beaver Creek, approximately 3.9 miles west of Fayetteville, Ziegler-Cline Construction Company, Fayetteville, \$55,874.64.

Johnston-Nash — Grading, bituminous surfacing and structures of 10.17 miles from a point on county road 1.5 miles south of Wendell to a point one mile northeast of Johnston county line, Wayne Engineering and Construction Company, Mount Olive, \$154,587.80, roadway; John H. Brinkley, Thomasville, \$36,505.50, structures.

Moore — Grading, bituminous surfacing and structures of 5.61 miles from N.C. 705 in Robbins northeast to N.C. 22, E. W. Grannis Company Fayetteville, \$121,324.50.

Anson — Grading and structures of 5.91 miles on N.C. 742 from a point 9.5 miles northwest of Wadesboro to a point northwest of Burnsville school, Kiker and Yount, Reidsville, \$80,039.80, roadway; Bowers Construction Company, Raleigh, \$75,594.00, structures.

Wilkes — Grading, bituminous surfacing and structures of 3.79 miles on N.C. 268 from a point in Wilkesboro 850 feet west of N.C. 16 and N.C. 18 west toward Patterson, Suber and Company, Whitmire, S. C., \$96,029.50, roadway; John H. Brinkley, Thomasville, \$42,079.00, structures.

Burke — Grading, bituminous surfacing and structures of 7.12 miles from U.S. 70 in Valdese toward N.C. 18, E. W. Grannis Company, Fayetteville, \$226,302.70, roadway; Wilson Construction Company, Salisbury, \$66,211.60, structures.

Rutherford-Polk — Structures for bridge over Broad River on county road 8.5 miles south of Spindale, E. W. Grannis Company, Fayetteville, \$82,568.00.

## PRICE TRENDS

(Continued from page one)  
showing increased prices continue to pour in on almost all kinds of equipment, supplies and repair parts.

As a note of explanation, we would like to point out that in some instances the following deliveries will not coincide with deliveries now being seen in various items ordered by us, some will be slower while others will be even longer.

ITEM	STANDARD PRODUCTS	SPECIAL ORDER
Bearings, Ball	3 to 4 Months	4 to 6 Months
Bearings, Roller	3 to 4 Months	4 to 8 Months
Bearings, Bronze	Stock	10 to 24 Weeks
Blocks, Pillow	9 Months	12 Months
Belting, Transmission	Stock to 2 Weeks	2 Months
Belts, V Rubber	Stock	12 Weeks
Chain, Steel	1 to 12 Months	1 to 6 Months
Chain, Malleable Iron	10 to 30 Months	14 to 36 Months
Paint Spraying Equipment	12 Weeks	24 Weeks
Bags, Paper	30 - 60 Days	60 - 90 Days
Electric Wire Cable	5 to 6 Months	5 to 6 Months
Insulated Wire Cable	6 to 8 Months	6 to 8 Months
Weatherproof Wire	20 to 24 Weeks	20 to 24 Weeks
Flexible Conduits	1 to 5 Months	1½ to 6 Months
Electric Generators	-----	8 to 10 Months
Electric Motors, 1-15 HP	3 Months	7 Months
Electric Motors, 20-75 HP	4 Months	10 Months
Fractional HP - All fractional except aircraft	-----	2 Years
Gas Engines, Air Cooled	10 to 12 Months	-----
Gas Engines, Single Cylinder	6 Months	10 Months
Gas Engines, Four Cylinder	10 Months	15 Months
Bolts, Nuts & Screws	1 to 24 Months	1 to 24 Months
Leather Gaskets	2 to 3 Weeks	2 to 8 Weeks
Oil Seal Gaskets	2 Weeks	12 Weeks
Felt Gaskets	2 to 3 Weeks	3 to 4 Weeks
Gears	2 to 8 Weeks	10 Months
Grinding Wheels (Vitrified)	-----	4 to 6 Weeks
Grinding Wheels (Resinoid)	3 Weeks	3 Weeks
Hose, Flexible, Assemblies	Stock to 2 Weeks	30 - 90 Days
Hose, Molded & Braided	Stock to 6 Months	Stock to 6 Months
Lighting Equipment	4 to 6 Months	8 to 12 Months
Lumber, White Pine - Delayed Delivery - Mills oversold	-----	-----
Lumber, Yellow Pine	2 Months	-----
Lumber, Cypress	1 to 2 Months	Unobtainable
Conveyors	6 Weeks	12 Weeks
Conveyor Belting	10 Months	10 Months
Bucket Elevators	4 Months	5 Months
Centrifugal Pumps	Stock to 8 Weeks	8 to 24 Weeks
Power Pumps	16 Weeks	24 Weeks
Hydraulic Pumps	24 Weeks	-----
Steel - on a quarterly quota basis	-----	-----
Twist Drills	1 to 2 Weeks	3 to 4 Weeks
Reamers	1 to 3 Weeks	4 to 5 Weeks
Valves	Stock to 120 Days	-----
Chain Link Fence	4 to 5 Months	-----

## WRIGHT BRIDGE

(Continued from page one)  
of the entire substructure of the bridge."

"The late William L. Craven was succeeded in 1945 as bridge engineer by T. B. Gunter, Jr., who had served for several years as assistant bridge engineer. The materials for rebuilding the structure were procured under the direction of C. B. Taylor, bridge maintenance engineer, who was in charge of the construction work. J. B. Broach, senior construction engineer, was responsible for certification of treatment of materials."

## A. H. GRAHAM

(Continued from page one)  
service has been received in the form of achievements above and beyond the call of duty. In many cases, employees have overcome adverse conditions of weather and circumstances to turn in an exceptionally fine account of themselves.

At this Christmas season, therefore, I wish to extend to each and every employe my personal appreciation for the outstanding work done in 1947, and to wish you a Merry Christmas and a successful and prosperous New Year.